

# Derek Ni

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<https://derekni.com> | <https://github.com/derekni>

## EDUCATION

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### Cornell University

B.S. Computer Science, GPA: 4.04

Courses: Algorithms, Functional Programming, Objected Oriented Programming, Database Systems, Artificial Intelligence, Machine Learning, Discrete Structures, Backend Development, Probability & Statistics

Ithaca, NY

Expected May 2023

### Thomas Jefferson High School for Science and Technology

Advanced Studies Diploma

Alexandria, VA

Graduated June 2019

## WORK EXPERIENCE

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### Fizz | YC/KP Startup

Software Engineer Intern

New York, NY

Jan 2022 – May 2022

- Developed a backend Firestore database to handle credit card and repayment logic
- Created webhook using Apto API to handle updating the backend for transaction updates
- Connected backend to mobile app and added Firebase event tracking using Flutter.

### Amazon

SDE Intern

Seattle, WA

May 2021 – Aug 2021

- Redesigned an API for getting messages with the Alexa Messaging Service
- Implemented encrypted pagination tokens for paging through messages with the API

### Tesla

Mobile Engineer Intern

Palo Alto, CA

Feb 2021 – May 2021

- Developed and improved components in the Tesla app using React Native and TypeScript
- Created simulator to test code endpoints using Flask, Python, and WebSockets

### Cornell University

CS 2110 Consultant

Ithaca, NY

August 2020 – December 2020

- Hosted weekly office hours to help students with object-oriented programming concepts
- Graded and gave feedback on coding assignments, quizzes and exams

## PERSONAL PROJECTS

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### [Ascii Stream](#) | [IvyHacks 2<sup>nd</sup> Overall](#) | TypeScript, WebRTC

- Video call web app that converts video to ASCII art to save bandwidth
- Implemented with WebRTC for real time text and audio communication between users
- Deployed as Next.js web app to Vercel, with Python script to convert video frames to ASCII art

### [Minto](#) | TypeScript

- Productivity Chrome extension to incentivize productivity by the minute through rewards
- Wrote scripts to track minutes worked in sessions, which users can spend on rewards they create

### [TaskTime](#) | Swift

- Productivity iOS app to motivate users to complete to-dos and keep healthy habits
- Created gamified to-do list to increase user productivity, through points and rewards

## SKILLS

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**Languages:** Python, TypeScript, JavaScript, Java, Dart, C#, Swift, OCaml, HTML, and SQL

**Tools:** ReactJS, Git, Visual Studio Code, Firebase, Flutter, Eclipse, XCode, and Jupyter Notebook